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NOT TO BE
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For The Editor of the Times
STEAM NAVIGATION
With the routes best adapted
BETWEEN

THE CAPE OF GOOD HOPE,

ST. HELENA, SIERRA LEONE, PERNAMBUCO,
BAHIA, RIO JANEIRO, BUENOS AYRES, &c.,

AND

GREAT BRITAIN,

~~~~~

PROPOSED BY

J. GORDON, MASTER MARINER.

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LONDON:

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1846.

LONDON:  
GEORGE BARCLAY, CASTLE STREET,  
LEICESTER SQUARE.

TO THE  
RIGHT HON. CHARLES WOOD,  
CHANCELLOR OF THE EXCHEQUER, &c.

---

*Fludyer Street, Westminster,  
15th of August, 1846.*

SIR,

In the discussion as to the North American mail steam-packets, which took place in the House of Commons on the 25th ult., you stated that “Mr. Cunard had performed the service he had undertaken most creditably to himself, and also with the greatest advantage and *profit* to the public.”

What the amount of annual expense of the mails between England and South America may be, I am, of course, unable to state, but it is generally believed to be an unreturned outlay of many thousands per annum; and I venture to affirm, that as our mails in the North Atlantic have been made to yield a profitable return, instead of being a heavy annual drag upon the funds of the exchequer as formerly, a like pecuniary advantage must result upon the establishment of a similar steam communication in the South Atlantic, if the vessels and their management be well arranged.

By my occupation as a mariner, my knowledge of those seas, and of the construction and capabilities of steam-boats, and looking forward to the political and commercial requirements in the Southern hemisphere, I have been led to digest and propose the accompanying scheme, which I have now the honour to present.

This proposal I recently embodied in a letter to my brother, because my occupation prevents my having any fixed residence in London, and because, in my absence, he can, from his engagements in the construction and working of large steam-ships, fully discuss the original and annual outlay and income ; and a printed copy of that letter I take leave to annex.

I have the honour to be,

Sir,

Your most obedient, humble Servant,

J. GORDON.

*To the Right Hon. Charles Wood,  
Chancellor of the Exchequer.*

(COPY.)

To ALEXANDER GORDON, *Esq., Engineer,*  
*22 Fludyer Street, Westminster.*

*London, July 15th, 1846.*

MY DEAR BROTHER,

The very imperfect and slow communication at present existing between Great Britain and her important colony of the Cape of Good Hope, and my practical knowledge, as a mariner, of that communication, and of the present capabilities of steam-navigation, have induced me to propose calling the attention of Her Majesty's Government, and of parties connected with the trade to, and across, the South Atlantic Ocean, to the establishment of a more regular and efficient communication than has yet been proposed with this important part of the world.

The vast commercial and political advantages which have been realised by steam-navigation to North America, the West Indies, the East Indies, and China, are apparent to all, whilst those to be expected from the establishment of a line of steamers to Brazil have prepared the public



to look at a reasonable proposal for similar communication with this country's interests in the South Atlantic.

Whilst the most of our colonies are thus in a manner brought nearer to the mother country, it appears that the important colonies of the Cape of Good Hope and the Mauritius are almost the only ones which have, as yet, no prospect of deriving benefit from the rapid increase of steam-navigation.

The proposal of that indefatigable officer, Lieutenant Waghorn, R.N., for extending the present line to the East Indies on to New Holland and New Zealand, deservedly occupies the attention of many, but neither the commercial interests involved in it, nor the adjustment of political position, can warrant this last-named scheme preventing or retarding, the advancement of South Atlantic steam-navigation so as to connect Great Britain with her Cape colonies.

There is reason to expect that, in the course of twelve or eighteen months, communication by steam with Brazil will be regularly established; and one steamer is now nearly ready, fitted with the screw, to make a trial trip, it is said to Rio Janeiro, touching at the intermediate ports of Pernambuco and Bahia on the outward voyage;\* and if the Company in question obtain a contract from Government, then touching at Pernambuco regularly will most likely be insisted on, if advantageous for the transmission of mails to other parts of the world, and if for the benefit of the mercantile interest at large.

Let me have your attention to the accompanying schemes for the conveyance of passengers, mails, and

\* This vessel, the *Antelope*, 600 tons, and 120 horse power, is now advertised for Rio, calling *both* at Pernambuco and Bahia.



goods, to the Cape of Good Hope from Pernambuco (on arrival of a steamer from England there), touching at the Island of St. Helena both going to and returning from Cape Town.

You will observe that the following Scheme I. is merely for a line of steamers between Brazil and Cape Town, in the event of the expected steam-communication to Brazil being established by the promoters of that line, and that in the case of that Company either not carrying out their proposed plans (or Government not being disposed to support them, by giving them a contract for the mails), then my Second Scheme will embrace a complete monthly communication with Sierra Leone, Pernambuco, Bahia, Rio Janeiro, with a further extension to Buenos Ayres, as well as that to the Cape of Good Hope and St. Helena.

### SCHEME I.

To carry into effect the first of these Schemes. Although two steam ships *could* do the work, it would be advisable to have three ; in case of one vessel requiring extensive repair ; that the departure of the mails from the Cape for England may not be dependent upon the arrival of the steamer from Brazil, which might be detained by some accident ; and because, instead of being hurried away from the Cape in four or five days after her arrival, she would have a month to refit ; thereby enabling the commanders to keep their vessels in more efficient working condition.

The distance from Pernambuco to St. Helena is 1784 miles, and from St. Helena to Cape of Good Hope 1680 miles, making a total of 3464 miles.\* The direct voyage

\* Geographical miles or knots, *i. e.* sixty miles to a degree, are to be understood by miles wherever they occur in this letter.

from Pernambuco to the Cape would save about 150 miles, and the advantage of touching at St. Helena would more than compensate for that trifling additional distance.

As the Admiralty contemplate making St. Helena a naval station, Government would in such a case certainly require the vessels enjoying a contract for the conveyance of the mails to touch there. The steamer might also take in a hundred tons of coals at St. Helena, to avoid being so deeply laden when leaving Brazil or Cape Town as to retard her progress ; particularly in the former case, when she would have the south-east trade to contend with nearly the whole of the passage.

If the communication with England and Brazil be monthly, it follows that there will be an arrival from England there once a-month ; if the steamer then arrive from home, say, on the 8th of the month, at Pernambuco, the steamer for the Cape of Good Hope will leave Pernambuco on that date, and the steamer from England having to proceed to Rio Janeiro, the return steamer, with mails from thence for England, *cannot* call at Pernambuco homeward-bound in less than eleven to twelve days (even if they have powerful vessels), after the 8th of each month, if giving the merchants at Rio only one or two days to answer their European correspondents' letters. Thus the return steamer *could not leave Pernambuco* with mails for England before the 20th of each month. If, therefore, one of the proposed steamers leave Pernambuco on the 8th of each month with the Cape mails and passengers, she will (allowing her to make only seven and a half knots against the trade wind) reach St. Helena on the 18th of the month, and remaining there twelve hours to take 100 tons of coal from

the hulk, will reach Cape Town on the 28th of the month.\*

The return passage from Cape Town to Pernambuco will be easily accomplished in from fourteen to seventeen days, having a fair wind very nearly the whole passage; and, I should say, seventeen days might be safely calculated upon even if she met hard north-west gales on leaving the Cape for the first two days, as occasionally occurs. I should therefore propose that she leave the Cape on the 2d of each month, so giving her *eighteen* clear days to reach Pernambuco by the 20th, to transfer her mails and passengers to the steamer there for England, thus giving people at Cape Town four or five days to answer their letters.

Having arrived at Pernambuco, let her proceed to Bahia to coal and refit, a distance of 360 miles, and so be ready to come again to Pernambuco by the 8th of ensuing month to proceed again to the Cape.†

By Table I. annexed, you will see that each vessel will have, according to this plan, about thirty-four or thirty-five lay days at Cape Town, and fifteen or sixteen lay days at Bahia, each trip.

Pernambuco Harbour will not admit vessels exceeding twelve feet draft of water, and the outer roads being un-

\* The Peninsular and Oriental Steam Navigation Company's steam ship, Precursor, steamed in ten days from St. Helena to Saldanah Bay, within fifty miles of the Cape, working expansively the whole way nearly, and encountered a strong south-east gale, when near the Cape, for two days. And the same Company's vessel, the Bentinck, went from the latitude of St. Helena to Cape Town in ten days, working expansively the whole way. The former vessel was deep with stores and coals.

† One of which short passages may always be accomplished under canvass, to save coals, and, occasionally, both of them.

safe a great part of the year, it would not do to coal and refit the vessel there, and this incurs the necessity of going to Bahia, where the harbour is spacious, safe, and deep, and where, if necessary, a vessel can be hove down for repairs. Here a depôt for coals must necessarily be established; a large hulk would be the cheapest and most convenient provision for the purpose.

At St. Helena a coal hulk must also be established, and lie close in in the bay. The steamer may go alongside this hulk, and 100 tons of coals could with ease be supplied in a few hours. The hulks should be large vessels of 800 tons. Old vessels, or North American ships, can be had easily for this purpose. At the Cape of Good Hope there must be another coal depôt, either on shore or in a hulk, as may hereafter be deemed advisable.

Now, on the supposition that letters take twenty to twenty-two days from England to Pernambuco, they might be delivered at the Cape in from forty days to forty-two days, and the return mails might reach England in about the same time.

The averages I have taken are low ones, and much below what Cunard's steamers regularly accomplish, even on their *outward* passages to Halifax; and I am convinced that, with powerful steamers, the Cape could by this route be reached in thirty-eight days from England, in the summer months of the South Atlantic, when the S.E. trade wind is neither strong nor steady.

In the route between Pernambuco and the Cape the advantages, in a nautical point of view, are great. A fine climate, where *heavy* gales of wind are of rare occurrence, excepting in and near Table Bay; that being indeed the only place of any risk. Vessels, however, now lie



there all the winter months, and, with good moorings laid down, there would be but little risk. Much of that risk, however, might be avoided by sending the steamer round to the safer anchorage in Simon's Bay to coal and refit, the distance by sea being only forty-five miles, and by land about sixteen miles.

In the event of its blowing hard from north-west, the return mails from Cape Town might be sent by land to the steamer at Simon's Bay, to start from thence.

The size of steamers necessary for this work should be from 1100 to 1200 tons, with from 350 to 400 horse-power, or such a vessel as the Honourable East India Company's steam frigate, *Ackbar*, built of wood. That successful vessel was supplied, and her engine of 350 horse power built, by Mr. Robert Napier, of Glasgow: she consumes, on an average, less than 23 tons of coals per day, and her speed has been lately adverted to in a letter to the "Times" newspaper by Lieutenant Waghorn, R.N.\*

\* Extract from "The Times," Dec. 30, 1845, being part of a letter from Lieut. Waghorn, R.N., to the editor of that paper:—

"The 'Morning Herald' of this day claims considerable credit for having done a great feat, as it supposes, in getting the overland dispatch, which left Bombay on the evening of the 1st of December to London in twenty-eight days.

"I beg to point out, for general information, where the gain was arrived at. It was in the simple fact, which nothing can contradict, of the rapid voyage of the *Ackbar*, belonging to the Hon. East India Company, in thirteen and a half days from Bombay to Suez (that vessel, two years ago, was the first steamer that ever made a passage against the south-west monsoon in the China Seas to Suez). The passage from Bombay to Suez has never before been done under sixteen and a half days, and here was the unprecedented gain of three days for which the 'Herald' claims credit, whereas it is to my friend Robert Napier, of Scotland, whose Firm built and made the engines for the *Ackbar*, that the real credit is due. There is no steamer like

Such a vessel would be constructed to stow about 450 to 500 tons as a maximum, or calling at St. Helena for 100 tons, say 350 would be sufficient, thus leaving a considerable space available for stowage of goods or freight. Vessels of this class, allowing even 400 horse power, might be built and fitted complete ready for sea for 50,000*l.* each.

I calculate the capital required for this scheme would be about 180,000*l.*

## SCHEME II.

Having thus concluded the detail of this first scheme, I proceed to that of the whole undertaking, viz. establishing a monthly communication from England to the Brazilian ports of Pernambuco, Bahia, and Rio Janeiro, with an extension to Buenos Ayres, together with the Cape of Good Hope and St. Helena, as just shewn, and a branch steamer from Cape de Verd Islands to Sierra Leone.

This scheme will require seven large steamers of the size already named; also one of about 600 tons and 220 horse power, and one of about 400 tons and 150 horse power.

Three large steamers as explained in the first scheme are required between Brazil and the Cape of Good Hope, and four more will be required between England and Rio Janeiro, calling at St. Vincent in the Cape de Verds

her in adverse weather in the Bombay line that I know of. If the *Ackbar* had brought the mail which I brought by way of Trieste, and accomplished the passage in the same space of time (thirteen and a half days), I should have been in London in twenty-six days."



for coals, and touching to land mails and passengers at Pernambuco and Bahia. Their duty I will advert to presently. The small steamer of 220 horse power to run between Rio Janeiro and Buenos Ayres on arrival of mails from England, and returning to Rio with mails *for* England. Buenos Ayres will thus be reached in about thirty or thirty-one days, allowing the mails from England to be twenty-five or twenty-six days to Rio. For the working of this extension steamer (see annexed Table III.), the distance from Rio to Buenos Ayres is 1100 miles.

The smallest steamer of only 150 horse power is to receive mails and passengers for Sierra Leone from the large steamer at St. Vincent, Cape de Verds, and proceed with them there, 850 miles distant, returning with mails from thence again for homeward-bound steamer. For plan of her work, see annexed Table IV.

The weather here being fine, with few gales, and those only of very short duration, such a small steamer will answer the purpose perfectly well.

The advantages of making the Cape de Verd, and St. Vincent in particular, a depôt for coals are; the steamer leaving England in good trim instead of being too deep; and preventing the possibility of her running short of coals before reaching Rio Janeiro. A fine harbour, safe, smooth, and easily accessible,\* where a hulk might

\* Extract from "Atlantic Memoir:" "Porto Grande, in the Island of St. Vincent, is the largest and best bay in the Cape de Verd Islands; is capable of holding 300 sail of large ships, well sheltered under the high lands, and has a fine appearance. Lieutenants (since captains) Vidal and Mudge, who surveyed this place in 1820, say of it that it now forms a good and safe anchorage, where you may strip and refit your ship, as it is sheltered from both wind and sea, the wind generally blowing from the N.E. over a part of the land, and seaward it is protected by the Island of St. Antonio."

lie at small expense and coaling be attended with little trouble. And again, it is in the *direct route* to Brazil, and enables the monthly communication with Sierra Leone to be most conveniently established. The price of live stock, fruit, &c. at Porto Praya and other islands, is so moderate, that they might be brought by the small steamer from Sierra Leone touching there for use of the passengers, and effect a great saving in the expenses of the passengers' table on board the vessels. Quantities of fine fruits might be sent to England and reach the markets within ten or twelve days of being gathered, enabling a fair trade to be established in those luxuries.

A steam-vessel leaving England for Brazil on the 18th of each month, would arrive at St. Vincent in ten days, or say eleven, she would then arrive on the 29th, and remaining there to coal for two entire days, would arrive at Pernambuco on the 7th or 8th of the ensuing month, and, transferring her Cape mails to the vessel in waiting there, proceed on to Bahia and Rio Janeiro, arrive at the latter place on the 13th of each month.

The return mails leaving on the 15th of each month would give merchants at Rio two days to answer correspondence; and, if not leaving till the 17th of each month, would arrive in England in the former case on the 10th, and, in the latter case, on the 12th of the succeeding month, as shewn in Table II. By this plan it is evident that four steamers would be sufficient between England and Brazil; and that if one be in need of extensive repair, three can easily do the work for the time being.

The maintaining another small steamer to relieve either the one running from St. Vincent to Sierra Leone, or the one from Rio to Buenos Ayres, in the event of these

requiring repairs, may be hereafter a matter for consideration, but that is the only addition that it might be argued was indispensably necessary.

By a reference to Table VI. it will be seen that the steamers between Cape Town and Brazil could arrive by the 19th of each month at Bahia instead of going to Pernambuco; and that by postponing the departure of the mail from Rio for England to the 17th of each month, as before mentioned, it would then leave Bahia on the 29th or possibly 21st of each month, giving the Cape steamer one to two days to spare on the time allowed in this table (Table VI.)

By this plan we should have an answer to a letter to Cape Town in eighty-four or eighty-five days, and from Rio in fifty-four to fifty-five days, less than two months.

The capital required for this scheme would be about 450,000*l*.

Having thus shewn you these, my two schemes, I have to offer a few remarks in conclusion.

The first scheme which I have drawn is, as I have said, on the supposition of the present Liverpool Company carrying out their plans. Those plans, it appears, are to be dependent on screw steamers, the first of which is 600 tons, and only 120 horse power; and this seems to me to be by no means adequate to the object I have in view, namely, the *regular* maintenance and most expeditious accomplishment of monthly intercommunication. I mean that the power of those boats, if not greatly increased, is totally insufficient to enable us to depend

on their passages with any degree of accuracy. It is true they will have a fair wind from about September till March the greater part of the passage out; but in those months they will have to contend with the N.E. monsoon on the Brazil coast from Rio up the coast on the return voyage, with only occasional slants; and in the other months, from March or April to September, it will be a very close haul to go down the coast from Pernambuco to Rio Janeiro, with occasional strong breezes. Add to this the frequent southerly and south-westerly gales to be experienced on leaving England, frequently in getting to the southward into the N.E. trade; and I say that, though the passages may, and no doubt will, be speedy, yet the arrivals cannot be predicted with that degree of accuracy so desirable in steam-navigation, and which has been proved to be attainable both by the Cunard Halifax line of steamers, and by the Great Western across the North Atlantic. These become matters for the serious consideration both of her majesty's government and of those merchants interested in the trade with the South Atlantic.

My second scheme now, as has been shewn, includes a monthly communication with Sierra Leone, Pernambuco, Bahia, Rio Janeiro, Buenos Ayres, St. Helena, and the Cape of Good Hope; and this is a *yearly* steaming of 192,528 miles for the seven large steamers, 26,280 miles for the one second-class steamer, and 19,800 miles by the third-class steamer, being a total of 238,608 miles to be accomplished yearly. Cunard's Company have now formed a fresh contract with government for forty-four voyages annually to Halifax and Boston, which amounts to 244,728 miles to be steamed in that time by that line of



steamers, and exceeding the distance in my scheme by 6120 miles annually, and for this they are to receive from government 145,000*l.* per annum.

My scheme will then not require more capital than that Company; will not steam so great a number of miles annually; will consume less coal, as the smaller boats will effect a saving in fuel; and none of them will have the difficulties of fog or ice to contend with; nor, indeed, the same difficulties of weather. A voyage *direct* to the Cape, calling for coals at St. Vincent and St. Helena, and the branch steamer to Sierra Leone only, would require but four boats exclusive of the small one, and would annually steam for a monthly communication to those three places,—Sierra Leone, St. Helena, and Cape Town, 171,888 miles, or little more than half what Mr. Cunard's line has now contracted to do in distance; but the advantage of going to Brazil and Buenos Ayres would be so great, from the valuable freights obtainable there of gems, specie, and drugs, and the greater probability of obtaining a contract from government by their discontinuance of the present packets on that station, renders the larger undertaking, in my opinion, much more desirable.

What the probable prospect of freight of valuables would be (in the available space which I calculate at about 150 tons) from Brazil I am unable to say, as I know of no way of obtaining statistical returns of the amount of those imports here from Brazil; but the passengers to and between the places named collectively would, I know, be large.

I have now demonstrated that this undertaking, large as it may appear, is not practically so great as that to be performed by Mr. Cunard's British and North American

line; nor is it any thing like the amount of work now performed to the eastward by the Peninsular and Oriental Company.

Trusting to your giving attention to these schemes that they may be brought under the notice of those interested, aware of the ease with which either of them may be carried into effect, and confident that the advantages to the mercantile community and nation at large are incalculable,

I remain, yours, &c.

J. GORDON.

P.S. The Cape steamers might branch off at the Cape de Verd Islands, instead of Brazil. This would increase the distance to be steamed, and consequent expenditure of coals, but would accelerate the Cape mails, enabling them to reach Cape Town in thirty-two or thirty-three days from England.

The small steamer for Sierra Leone might probably in this case be dispensed with, the Cape steamer touching there on her way down.



## TABLE I.

*Referred to in page 9.*

Plan by which three Steamers have to work between Brazil and Cape Town to and fro once a-month.  
This table shews the absence from Bahia of one Steamer to be 2 months and 14 days.

|              |                                    |                       |          |                      |                           |                  |                       |               |                                                   |                  |                  |                                                  |
|--------------|------------------------------------|-----------------------|----------|----------------------|---------------------------|------------------|-----------------------|---------------|---------------------------------------------------|------------------|------------------|--------------------------------------------------|
| Leaves Bahia | Calls at Pernambuco for mails, &c. | Arrives at St. Helena | Remains  | Arrives at Cape Town | Remains to coal and refit | Leaves Cape Town | Arrives at St. Helena | Remains there | Arrives at Pernambuco and lands mails for England | Arrives at Bahia | Remains to refit | Leaves Bahia to go again to Pernambuco for mails |
| 6th March    | 8th March                          | 18th March            | 12 hours | 28th March           | 35 days                   | 2d May           | 10th May              | 12 hours      | 18th May                                          | 20th May         | 16 days          | 6th June                                         |

Thus only three Steamers are required, they being ready to start again the third month after leaving Bahia, and having 16 days to lay at one end and 35 to lay at the other.

## TABLE II.

*Referred to in page 14.*

Shewing the route of one of the Steamers from England to Brazil, and her route home after remaining there for thirty-two days, and shewing her to be ready to start again in four months.

|                    |                      |                 |                       |                  |                        |               |                    |                  |                       |                           |               |                                                      |                        |                                           |
|--------------------|----------------------|-----------------|-----------------------|------------------|------------------------|---------------|--------------------|------------------|-----------------------|---------------------------|---------------|------------------------------------------------------|------------------------|-------------------------------------------|
| Leaves England     | Arrives at Cape Verd | Remains to Coal | Arrives at Pernambuco | Arrives at Bahia | Arrives at Rio Janeiro | Remains there | Leaves Rio         | Arrives at Bahia | Arrives at Pernambuco | Arrives at Cape de Verdes | Remains there | Arrives in England, again being absent 84 or 85 days | Remains there to refit | Leaves England again for Brazil as before |
| 18th Mar.          | 28th Mar.            | 2 days          | 8th April             | 10th April       | 13th April             | 32 days       | 15th May*          | 18th May         | 20th May              | 28th May                  | 2 days        | 10th June                                            | 38 days                | 18th July                                 |
| An outward voyage. |                      |                 |                       |                  |                        |               | A homeward voyage. |                  |                       |                           |               |                                                      |                        |                                           |

Thus four Steamers will be sufficient, and if one be disabled, three can still perform the duty by their only remaining eight days in England instead of thirty-eight days.

\* By making the day of leaving Rio Janeiro the 17th instead of the 15th of each month, it would enable the merchants at Rio to have four days to answer their European correspondents. It would then give the merchants from the 13th to the 17th in London to answer their letters from either Brazil or the Cape of Good Hope, which would be quite sufficient.

TABLE III.

*Referred to in page 11.*

Shewing work of small Steamer of 600 tons, 220 horse power, on from Rio Janeiro to Buenos Ayres and back again with mails for England monthly.

| Leaves<br>Rio Janeiro | Arrives at<br>Buenos Ayres | Remains<br>there | Leaves<br>Buenos Ayres | Arrives at<br>Rio Janeiro | Remains<br>there | Leaves again for<br>Buenos Ayres |
|-----------------------|----------------------------|------------------|------------------------|---------------------------|------------------|----------------------------------|
| 14th April            | 19th April                 | 18 days          | 7th May                | 12th May                  | 2 days           | 14th May                         |

This Steamer can call if required to land and receive mails at Monte Video, weather permitting.

TABLE IV.

*Referred to in page 11.*

Shewing the work of smallest Steamer, 400 tons, 150 horse power, with mails from Cape de Verd Islands to Sierra Leone and back with mails for England monthly.

| Leaves St Vincent<br>Cape de Verd | Arrives at<br>Sierra Leone | Remains<br>there | Leaves<br>Sierra Leone | Arrives at<br>St. Vincent's | Remains<br>there | Leaves again for<br>Sierra Leone |
|-----------------------------------|----------------------------|------------------|------------------------|-----------------------------|------------------|----------------------------------|
| 30th March                        | 4th April                  | 17 days          | 21st April             | 26th April                  | 4 days           | 30th April                       |

This Steamer could bring any stock required from Porta Praya in passing on her way from Sierra Leone in case it cannot be had from St. Antonia, nine miles from St. Vincent.

TABLE V.

Distances between Places.

| From           | to             | Miles. |
|----------------|----------------|--------|
| Southampton .  | St. Vincent .. | 2390   |
| St. Vincent .. | Sierra Leone.. | 860    |
| St. Vincent .. | Pernambuco..   | 1610   |
| Pernambuco .   | Bahia .....    | 370    |
| Bahia .....    | Rio Janeiro .. | 693    |
| Rio Janeiro .. | Buenos Ayres   | 1100   |
| Pernambuco ..  | St. Helena.... | 1784   |
| St. Helena ..  | Cape Town ..   | 1680   |
| Cape de Verd   | Rio .....      | 2673   |
| Bahia .....    | St. Helena.... | 1920   |

# TABLE VI.

*Referred to in page 13.*

Shewing route of Cape Steamers to and from Bahia to Cape Town, *via* St. Helena, *not* going to Pernambuco.

|                                                                                                                                       |                          |                  |                         |                           |                     |                          |                  |                     |                  |
|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------|-------------------------|---------------------------|---------------------|--------------------------|------------------|---------------------|------------------|
| Leaves<br>Bahia                                                                                                                       | Arrives at<br>St. Helena | Remains<br>there | Arrives at<br>Cape Town | Remains there<br>to refit | Leaves<br>Cape Town | Arrives at<br>St. Helena | Remains<br>there | Arrives at<br>Bahia | Remains<br>there |
| 10th April                                                                                                                            | 20th April               | 12 hours         | 30th April              | 32 days                   | 2d May*             | 10th May                 | 12 hours         | 19th May            | 22 days          |
| To the Cape                                                                                                                           |                          |                  |                         |                           | From the Cape       |                          |                  |                     |                  |
| * Not the same steamer which arrived two or three days before. This date it would, probably, be found<br>might be extended to the 3d. |                          |                  |                         |                           |                     |                          |                  |                     |                  |

By this plan news would be two days longer between the Cape and England, but the steamers would have less work to do, and save coals, not having to run between Pernambuco and Bahia, and would save about, probably, ninety tons of coals per month.











